

ABSTRACT OF THE DISCLOSURE

The present invention provides a method of screening for a compound that binds to a selected nucleic acid comprising contacting compound fluorescently labeled by a fluorescent protein with a cell having a plurality of copies of the nucleic acid in an array such that the nucleic acid can be directly detected when bound by fluorescently labeled compound; and directly detecting the location of fluorescence within the cell, fluorescence aggregated at the site of the nucleic acid array indicating a compound that binds to the selected nucleic acid. In particular compounds such a transcription factors can be screened. Reagents for such method are provided including a mammalian cell having a plurality of steroid receptor response elements in an array such that the response element can be directly detected when bound by fluorescently labeled steroid receptor and a chimeric protein comprising a fluorescent protein fused to a steroid receptor.